Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	3	"20020182441"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 11:02
S2	1	2000wo-us32511	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/25 16:58
S3	2	2001wo-JP10487	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/25 15:43
S4	3	"20030068526"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/25 16:57
S5	0	2000WO-US70655	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/25 16:58
S6	0	1999WO-US70655	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/25 16:58
S7	0	2000wo-us70655	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR .	OFF	2005/06/25 16:59
S8	1	2000wo-us12946	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/25 17:37
S9	2	"20030054198"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/25 18:18

S10	1026	trifluoromethylpyridine	US-PGPUB; USPAT;	OR	OFF	2005/06/25 18:18
			EPO; JPO; DERWENT; IBM_TDB			
S11	30	fluorophenyl adj2 trifluoromethylpyridine	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF .	2005/06/25 18:19
S12	51	trifluoromethyl adj2 phosphine	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 09:11
S13	27	(bis di) adj trifluoromethyl adj2 phosphine	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 09:13
S14	1	(bis di) adj trifluoromethylphenyl adj2 phosphine	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 09:13
S15	25	(bis di) adj trifluoromethyl adj phenyl adj2 phosphine	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 09:16
S16	43158	fluoroalkyl perfluoroalkyl trifluoromethyl and (luminescent electroluminescent)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 09:20
S17	1711	(fluoroalkyl perfluoroalkyl trifluoromethyl) and (luminescent electroluminescent)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 09:20
S18	37	(fluoroalkyl perfluoroalkyl trifluoromethyl) near12 (preferred solubility improv\$5 better shorter emission) and (luminescent electroluminescent)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 09:21
S19	2	"20020048689"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/26 11:02

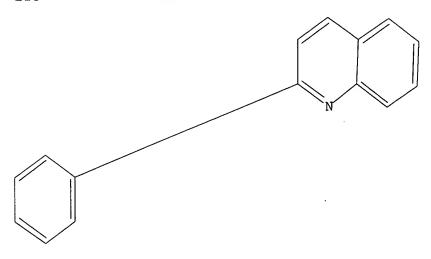
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                   512182-79-5
             1 S
L1
                   512182-79-5/CRN
L2
             0 S
             4 S 512182-89-7/RN OR 512182-91-1/RN OR
L3
             512182-93-3/RN OR 512182-95-5/RN
             2 S 435294-37-4/RN OR 435294-74-9/RN
L4
             1 S
                   435294-05-6/RN
L5
    FILE 'HCAPLUS' ENTERED AT 12:16:38 ON 02 JUN 2005
             2 S L5
L6
    FILE 'REGISTRY' ENTERED AT 12:26:04 ON 02 JUN 2005
                   86178.2.1/RID
            15 S
L7
            23 S
                   91989.1.1/RID
\Gamma8
            11 S (L7 OR L8) AND F/ELS
L9
    FILE 'HCAPLUS' ENTERED AT 12:27:33 ON 02 JUN 2005
             4 S L9
L10
    FILE 'STNGUIDE' ENTERED AT 12:28:46 ON 02 JUN 2005
    FILE 'REGISTRY' ENTERED AT 12:48:22 ON 02 JUN 2005
               STRUCTURE UPLOADED
L11
           50 SEA SSS SAM L11
L12
               STRUCTURE UPLOADED
L13
          50 SEA SSS SAM L13
L14
               STRUCTURE UPLOADED
L15
L16
           50 SEA SSS SAM L15
        377580 S (591.50.52 OR 591.79.52)/RID.
L17
     218424 S L17 AND 46.150.18/RID
L18
L19
        33403 S L18 AND F/ELS
           10 S L19 AND IRIDIUM
L20
           10 S L19 AND IR/ELS
L21
           10 S (L20 OR L21)
L22
          928 S PHENYLQUINOLIN?
L23
       103695 S PHENYL(3A) (ISOQUINOLIN? OR QUINOLIN?)
L24
        188 S (L23 OR L24) AND IR/ELS
L25
          188 S (L23 OR L24) AND IRIDIUM
L26
          188 S (L25 OR L26)
L27
           80 S
                   L27 AND F/ELS
L28
           32 S L28 AND O/ELS
L29
            9 S L28 AND (CL OR BR)/ELS
L30
           1 S (L28 OR L29 OR L30) AND PHENYL QUINOLIN'
1 S (L28 OR L29 OR L30) AND PHENYLQUINOLIN?
                  (L28 OR L29 OR L30) AND PHENYL QUINOLIN?
L31
L32
            1 S
                   (L31 OR L32)
L33
           59 S (L28 OR L29 OR L30) AND 1/NC
L34
                   (L28 OR L29 OR L30) NOT (2/NC OR 3/NC OR
L35
            59 S
               4/NC OR 5/NC OR 6/NC OR 7/NC OR 8/NC OR 9/NC OR 10/NC)
     FILE 'HCAPLUS' ENTERED AT 13:33:16 ON 02 JUN 2005
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9 S

L36

L35

ENTER STRUCTURE FORMAT (SIM), NOS:SIM STR



=> d sim L15

L15

STR

```
CAS/STN FILE 'HCAPLUS' ENTERED AT 14:58:29 ON 01 JUN 2005
            1 S US2004094769/PN
L1
              SEL PLU=ON L1 1- RN :
                                        42 TERMS
L2
    FILE 'REGISTRY' ENTERED AT 14:59:18 ON 01 JUN 2005
                    QUINOLINE/CN
L3
            1 S
                     L2
            42
                S
1.4
L5
            0
                S
                     L4 AND 591.79.52/RID
            42
                S
                     L2
L6
               S
L7
            35
                     L6 AND F/ELS
               S
L8
            42
                     L2
               S
                     L8 AND N/ELS
L9
           42
               S
L10
           42
                    L2
           12 S
                    L10 AND O/ELS
L11
          42 S
                    L2
L12
          13 S
                    L12 AND IR/ELS
L13
          42 S
                    L2
L14
           1 S
                    L14 AND QUINOLIN?
L15
            35 S
                    L7 AND L8 AND L9
L16
           9 S L11 AND L16
L17
                    L11 OR L13 OR L15 OR L17
           19 S
L18
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                    L1 AND L18
            1 S
T.19
L20
            16
                S
                     L13
               S
L21
            15
                     L20 NOT L19
    FILE 'REGISTRY' ENTERED AT 15:05:18 ON 01 JUN 2005
         1 S
                   2-AZANAPHTHALENE/CN
L22
         41085 S 591.50.52/RID
L23
        336022
                s 591.79.52/RID
L24
· L25
            9 S (L23 OR L24) AND F/ELS AND O/ELS AND IR/ELS
    FILE 'HCAPLUS' ENTERED AT 15:10:08 ON 01 JUN 2005
             6 S L25 NOT L19
L26
             SEL PLU=ON L26 1- RN:
                                       210 TERMS
L27
    FILE 'REGISTRY' ENTERED AT 15:10:44 ON 01 JUN 2005
           210 S
                   L27
L28
           137
                S
                     L28 AND IR/ELS
L29
            60
                S
                     L29 AND N/ELS AND F/ELS
L30
     FILE 'HCAPLUS' ENTERED AT 15:11:28 ON 01 JUN 2005
          6 S L26 AND L30
L31
     FILE 'STNGUIDE' ENTERED AT 15:11:48 ON 01 JUN 2005
     FILE 'REGISTRY' ENTERED AT 15:12:54 ON 01 JUN 2005
          2300 S IR/ELS AND O/ELS AND N/ELS AND F/ELS
L32
           9 S
                    (L23 OR L24) AND L32
L33
                    AZANAPHTH? AND L32
            0 S
L34
                   PHENYL AND L32
          1634 S
L35
                   QUINOLIN? AND L32
L36
            99
                S
            80
                S
                    L35 AND L36
L37
            87 S
                     (L33 OR L37) AND L32 .
     FILE 'HCAPLUS' ENTERED AT 15:15:57 ON 01 JUN 2005
           25 S L38 NOT (L20 OR L31)
L39
          4996 S BIDENT? AND LIGAND AND (IR OR IRIDIUM)
L40
            88 S L40 AND (LED OR OLED OR LIGHT(2A) EMI####### OR CHARG###(3A) TRANSPORT#######)
T.41
            3 S L40 AND (SEMICOND######## OR CONDUCT####### OR ELECTRODE) (3A) (?LAYER? OR FILM
L42
OR ?COAT?)
            47 S
                   L39 OR L20 OR L31
L43
            3 S L42 NOT L43
L44
           1 S
L45
                    L44 AND ?IRIDIU?
             SEL PLU=ON L45 1- RN:
                                        40 TERMS
L46
```

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FILE 'REGISTRY' ENTERED AT 15:22:17 ON 01 JUN 2005
L47
            40 S
                     1.46
L48
             9
                S
                     L47 AND IR/ELS
    FILE 'HCAPLUS' ENTERED AT 15:22:32 ON 01 JUN 2005
                   L45 AND L48
            1 S
L49
                     L43 AND (?LAYER? OR FILM OR ?COAT?)
L50
            13
                S
    FILE 'STNGUIDE' ENTERED AT 15:24:28 ON 01 JUN 2005
    FILE 'REGISTRY' ENTERED AT 15:26:11 ON 01 JUN 2005
         12109 S ((L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15 OR
L16 OR L17 OR L18) OR (L23 OR L24) OR (L28 OR L29 OR L30) OR (L32 OR L33 OR L34 OR
OR L36 OR L37 OR L38) OR (L47 OR L48)) AND DIOX###########
               S L51 AND IR/ELS AND F/ELS AND N/ELS
           15
    FILE 'HCAPLUS' ENTERED AT 15:27:01 ON 01 JUN 2005
L53
               S
                    L52
    FILE 'REGISTRY' ENTERED AT 15:29:59 ON 01 JUN 2005
        149375 S ((L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15 OR
L54
L16 OR L17 OR L18) OR (L23 OR L24) OR (L28 OR L29 OR L30) OR (L32 OR L33 OR L34 OR
                                                                                             L35
L54 AND (L23 OR L24) AND F/ELS
    FILE 'HCAPLUS' ENTERED AT 15:30:45 ON 01 JUN 2005
                     L55(L)(LIGHT OR OLED OR CHARGE OR LED OR OPTIC#### OR ?LAYER? OR FILM OR
L56
            72 S
?COAT?)
                     L56 NOT (L53 OR L50 OR L49 OR L44 OR L39 OR L31 OR L21 OR L19)
            72
L57
                     L57 AND IRIDIUM
            0
               S
L58
                     L57 AND BIDENT?
L59
             0
               S
                     L57 AND LIGAND?
1.60
             1
               S
                     (METAL##### OR COMPLEX####### OR ORGANOMET? OR METALLOORGAN? OR METALORG? OR
         30519
               S
MOVPE OR METALLORG?) (4A) (IR)
             0 S L57 AND L61
L62
                    L57 AND (METAL##### OR COMPLEX####### OR ORGANOMET? OR METALLOORGAN? OR
             3 S
L63
METALORG? OR MOVPE OR METALLORG?) (7A) (?LAYER? OR FILM OR ?COAT? OR ?MEMBRAN?)
    FILE 'REGISTRY' ENTERED AT 15:37:57 ON 01 JUN 2005
                     IRIDIUM(9A)(OXI###### OR DIOX####### OR OXY########)
L64
          3328 S
                     L64 AND N/ELS AND F/ELS AND C/ELS
L65
           190
                S
    FILE 'STNGUIDE' ENTERED AT 15:39:00 ON 01 JUN 2005
    FILE 'HCAPLUS' ENTERED AT 15:39:14 ON 01 JUN 2005
                     L60 OR L63
L66
            4 S
L67
                     L66 OR L53 OR L50 OR L49 OR L44 OR L39 OR L31 OR L21 OR L19
L68
            68
               S
                     L57 NOT L67
                     L68 AND (METAL##### OR COMPLEX####### OR ORGANOMET? OR METALLOORGAN? OR
            0 S
METALORG? OR MOVPE OR METALLORG?) (7A) (?LAYER? OR FILM OR ?COAT? OR ?MEMBRAN?)
          0 S
L70
                     L68 AND OLED
L71
             4
                     L68 AND LED
                S
                     L68 AND LIGHT (4A) (EMI####### OR DEVICE)
L72
             3
                S
L73
            0
                S
                     L68 AND L65
            0 S
L74
                     L68 AND L64
            5 S
                     (L71 OR L72)
L75
```

L36 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:31593 HCAPLUS

DN 136:93307

TI Electroluminescent iridium compounds with fluorinated phenylpyridines, phenylpyrimidines, and phenylquinolines and devices made with such compounds

IN Petrov, Viacheslav A.; Wang, Ying; Grushin, Vladimir

PA	E.	I.	Du	Pont	de	Nemours	&	Co.,	USA	
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PA	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 2002002714	A2	20020110	WO 2001-US20539	20010627
	WO 2002002714	A3	20021024		
	CA 2411624	AA	20020110	CA 2001-2411624	20010627
	AU 2001071550	A5	20020114	AU 2001-71550	20010627
	EP 1295514	A2	20030326	EP 2001-950576	20010627
	JP 2004503059	Т2	20040129	JP 2002-507959	20010627
	EP 1424382	A2	20040602	EP 2004-4541	20010627
	EP 1431288	A2	20040623	EP 2004-4542	20010627
	EP 1431289	A2	20040623	EP 2004-4543	20010627
	TW 593623	В	20040621	TW 2001-90115959	20010629
	CA 2455844	AA	20030731	CA 2001-2455844	20011226
	WO 2003063555	A1	20030731	WO 2001-US49522	20011226
	EP 1466506	A1	20041013	EP 2001-991428	20011226
	US 2004075096	A1	20040422	US 2003-720967	20031124
	US 2004116696	A1	20040617	US 2003-720954	20031124
	US 2005095457	A1	20050505	US 2004-983119	20041105
PRAI	US 2000-215362P	P	20000630		
	US 2000-224273P	P	20000810		
	US 2001-879014	В1	20010612		
	EP 2001-950576	A3	20010627		
	WO 2001-US20539	W	20010627		
	WO 2001-US49522	W	20011226		
	US 2003-366295	A3	20030213		
~ ~	MADDAM 126 02207				

OS MARPAT 136:93307

AB Org. electroluminescent devices are described which employ an emitting layer comprising .gtoreq.20 wt. % pf .gtoreq.1 compd. described by the general formula IrLaLbLcxL'yL"z (x = 0 or 1, y = 0, 1, or 2, and z = 0 or 1, with the proviso that x= 0 or y + z = 0 and when y = 2 then z = 0; L' = a bidentate ligand or a monodentate ligand, and is not a phenylpyridine, phenylpyrimidine, or phenylquinoline with the proviso that: when L' is a monodentate ligand, y + z = 2, and when L' is a bidentate ligand, z = 0; L" = a monodentate ligand, and is not a phenylpyridine, and phenylpyrimidine, or phenylquinoline; and La, Lb, and Lc the same or different compds. are described by the general formula I; adjacent pairs of R1-4 and R5-8 can be joined to form a five- or six-membered ring, at least one of R1-8 is selected from F, CnF2n+1, OCnF2n+1, and OCF2X; n = 1-6; and X = H, Cl, or Br, and A = C or N, provided that when A = N, there is no R1). The electroluminescent compds. as well as selected substituted 2-phenylpyridines, phenylpyrimidines, and phenylquinolines that may be used to make the compds. are also described.

IT 387859-64-5P

(electroluminescent devices based on iridium compds. with fluorinated phenylpyridines and phenylpyrimidines and phenylquinolines and the compds. and their precursors)

RN 387859-64-5 HCAPLUS

CN Iridium, bis[2-(2-quinolinyl-.kappa.N)-4-(trifluoromethyl)phenyl-.kappa.C](trifluoroacetato-.kappa.O,.kappa.O')- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***



L36 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:428917 HCAPLUS

DN 137:26190

TI Electroluminescence element and electroluminescent display device containing the same

IN Kamatani, Jun; Okada, Shinjiro; Tsuboyama, Akira; Takiguchi, Takao; Miura, Seishi; Noguchi, Koji; Moriyama, Takashi; Igawa, Satoshi; Furugori, Manabu

PA Canon Kabushiki Kaisha, Japan

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	WO 2002044189	A1	20020606	WO 2001-JP10487	20011130	
	AU 2002022566	A5	20020611	AU 2002-22566	20011130	
	EP 1348711	A1	20031001	EP 2001-998553	20011130	
	US 2003068526	A1	20030410	US 2002-73012	20020212	
PRAI	JP 2000-364650	Α	20001130			
	JP 2001-64205	Α	20010308			
	JP 2001-128928	Α	20010426			
	WO 2001-JP10487	W	20011130			
~ ~	MARRAR 137.00100					

OS MARPAT 137:26190

The invention relates to a luminescent element characterized by having a layer contg. a metal coordination compd. which has a partial structure MLm represented by the following general formula I (A, B = isoquinolyl group residue; M = metal) and which as a whole is preferably represented by the following formula MLmL'n (M = IR, Pt, Rh, Pd; m = 1, 2, 3; n = 0, 1, 2; MLm = compd. I; ML'n = compd. II-IV; A', B', B" = ring group residue; E, G = C1-20 alkyl; J = H, C1-20 alkyl). The luminescence element shows the high luminescent efficiency and the good stability.

IT 435294-01-2P 435294-05-6P 435294-06-7P

(electroluminescence element and electroluminescent display device contg. $\acute{\text{s}}$ ame)

RN 435294-01-2 HCAPLUS

CN Iridium, tris[2-(1-isoquinolinyl-.kappa.N)-4-(trifluoromethyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

435294-05-6 HCAPLUS

RN

CN Iridium, bis[4-fluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C](2,4-pentanedionato-.kappa.O,.kappa.O')- (9CI) (CA INDEX NAME)

sheet I of 20

$$\begin{array}{c} H - \\ N \\ N \\ \end{array}$$

RN 435294-06-7 HCAPLUS

CN Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-07-8 HCAPLUS

CN Iridium, tris[2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN

.kappa.C)- (9CI) (CA INDEX NAME)

435294-16-9 HCAPLUS RN

Iridium, tris[5-fluoro-2-(5-fluoro-1-isoquinolinyl-.kappa.N)phenyl-CN .kappa.C]- (9CI) (CA INDEX NAME)

435294-17-0 HCAPLUS RNCN

Iridium, tris[5-fluoro-2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-18-1 HCAPLUS

CN Iridium, tris[5-fluoro-2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-19-2 HCAPLUS

CN Iridium, tris[5-fluoro-2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-20-5 HCAPLUS

CN Iridium, tris[2,4-difluoro-6-(5-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-21-6 HCAPLUS

CN Iridium, tris[2,3,4-trifluoro-6-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-22-7 HCAPLUS

CN Iridium, tris[5-(trifluoromethyl)-2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-23-8 HCAPLUS

CN

Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)-5(trifluoromethyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-24-9 HCAPLUS

CN Iridium, tris[5-(trifluoromethyl)-2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-25-0 HCAPLUS

CN Iridium, tris[2,3,4,5-tetrafluoro-6-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-27-2 HCAPLUS

CN Iridium, tris[2,3,4,5-tetrafluoro-6-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-41-0 HCAPLUS

CN Iridium, tris[2-(5-fluoro-1-isoquinolinyl-.kappa.N)-4-(trifluoromethoxy)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-42-1 HCAPLUS

CN

CN

Iridium, tris[4-(trifluoromethoxy)-2-[5-(trifluoromethyl)-1-isoquinolinyl.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-43-2 HCAPLUS

Iridium, tris[4-(trifluoromethoxy)-2-[4-(trifluoromethyl)-1-isoquinolinyl.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-44-3 HCAPLUS

CN Iridium, tris[2-(5-fluoro-1-isoquinolinyl-.kappa.N)-4-(heptyloxy)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-47-6 HCAPLUS
CN Iridium, tris[2,4-difluoro-6-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C](9CI) (CA INDEX NAME)

RN 435294-48-7 HCAPLUS
CN Iridium, tris[3,5-difluoro-2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-49-8 HCAPLUS

CN Iridium, tris[2,3,4,5-tetrafluoro-6-(3,4,5,6,7,8-hexafluoro-1-isoquinoliny1-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-50-1 HCAPLUS

CN Iridium, (2,4-pentanedionato-.kappa.O,.kappa.O')bis[3,4,5,6-tetrafluoro-2-(4,5,6,7,8-pentafluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{O} \\ \text{F} \\ \text{F} \\ \text{F} \end{array}$$

RN 435294-51-2 HCAPLUS

CN Iridium, tris[5-[(3,3,4,4,5,5,5-heptafluoropentyl)oxy]-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

— CF3

RN 435294-52-3 HCAPLUS

Iridium, bis[5-[(3,3,4,4,5,5,5-heptafluoropentyl)oxy]-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C](9CI) (CA INDEX NAME)

RN 435294-53-4 HCAPLUS

CN Iridium, [5-[(3,3,4,4,5,5,5-heptafluoropenty1)oxy]-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]bis[2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]-(9CI) (CA INDEX NAME)

RN 435294-54-5 HCAPLUS CN Iridium, tris[2-(1-isoquinolinyl-.kappa.N)-5-(tridecafluorohexyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-55-6 HCAPLUS
CN Iridium, tris[5-(tridecafluorohexyl)-2-[5-(trifluoromethyl)-1isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

CN

RN 435294-57-8 HCAPLUS

CN Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)-5-(tridecafluorohexyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-58-9 HCAPLUS

CN Iridium, bis[2-(4-fluoro-1-isoquinolinyl-.kappa.N)-5-(tridecafluorohexyl)phenyl-.kappa.C][2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-59-0 HCAPLUS

CN Iridium, bis[2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C][2-(1-isoquinolinyl-.kappa.N)-5-(tridecafluorohexyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-61-4 HCAPLUS

CN Iridium, [2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]bis[2-(1-isoquinolinyl-.kappa.N)-5-[(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptyl)oxy]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN

CN Iridium, bis[2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C][2-(1-isoquinolinyl-.kappa.N)-5-[(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptyl)oxy]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-63-6 HCAPLUS

CN Iridium, tris[3,4-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C](9CI) (CA INDEX NAME)

RN 435294-64-7 HCAPLUS

CN Iridium, bis[3,4-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C][2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-67-0 HCAPLUS

CN Iridium, tris[5-butyl-3,4-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-68-1 HCAPLUS

CN Iridium, bis[5-butyl-3,4-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C](2,4-pentanedionato-.kappa.O,.kappa.O')- (9CI) (CA INDEX NAME)

RN 435294-73-8 HCAPLUS

CN Iridium, di-.mu.-chlorotetrakis[4-fluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]di- (9CI) (CA INDEX NAME)

RN 435294-74-9 HCAPLUS

CN Iridium, di-.mu.-chlorotetrakis[4,6-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]di- (9CI) (CA INDEX NAME)

RN 435294-75-0 HCAPLUS

CN Iridium, di-.mu.-chlorotetrakis[5-(trifluoromethyl)-2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]di- (9CI) (CA INDEX NAME)

435294-76-1 HCAPLUS RN

Iridium, tetrakis[5-butyl-3,4-difluoro-2-(4-fluoro-1-isoquinolinyl-kappa.N)phenyl-.kappa.C]di-.mu.-chlorodi- (9CI) (CA INDEX NAME) CN

RN

435294-77-2 HCAPLUS
Iridium, di-.mu.-chlorotetrakis[2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]di- (9CI) (CA INDEX NAME) CN

RN 435294-78-3 HCAPLUS

CN

Iridium, di-.mu.-chlorotetrakis{2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]di- (9CI) (CA INDEX NAME)

RN 435294-79-4 HCAPLUS

CN Iridium, di-.mu.-chlorotetrakis[2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]di- (9CI) (CA INDEX NAME)

RN 435294-80-7 HCAPLUS

CN Iridium, di-.mu.-chlorotetrakis[3,4,5,6-tetrafluoro-2-(3,4,5,6,7,8-hexafluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]di- (9CI) (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

Sheet

L19 ANSWER 1 OF 1 HCAPLUS COPYRIGHT ACS on STN

2002:964786 DN 138:47038 ED Entered STN: 20 Dec 2002 AN

Electroluminescent iridium compounds with fluorinated phenylpyridines, ΤI phenylpyrimidines, and phenylquinolines and devices made with such compounds

Grushin, Vladimir; Lecloux, Daniel D.; Petrov, Viacheslav. A.; Wang, Ying IN

E. I. Du Pont de Nemours & Co., USA PA

PA	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002190250 US 6670645	A1 B2	20021219	US 2001-27421	20011220
	US 2002121638	A1	20020905	US 2001-879014	20010612
	EP 1424382	A2	20040602	EP 2004-4541	20010627
	EP 1431288	A2	20040623	EP 2004-4542	20010627
	EP 1431289	A2	20040623	EP 2004-4543	20010627
	CA 2455844	AA	20030731	CA 2001-2455844	20011226
	WO 2003063555	A1	20030731	WO 2001-US49522	20011226
	EP 1466506	A1	20041013	EP 2001-991428	20011226
	US 2004089867	A1	20040513	US 2003-696349	20031029
	US 2004106007	A1	20040603	US 2003-696095	20031029
	US 2004108507	A1 '	20040610	US 2003-696003	20031029
	US 2004188673	A1	20040930	US 2003-696060	20031029
	US 2004191959	A1	20040930	US 2003-696401	20031029
	US 2004094769	A1	20040520	US 2003-699411	20031030 <
	US 2004075096	A1	20040422	US 2003-720967	20031124
	US 2004116696	A1	20040617	US 2003-720954	20031124
	US 2005095457	A1	20050505	US 2004-983119	20041105
PRAI	US 2000-215362P	P	20000630		
	US 2000-224273P	P	20000810		
	US 2001-879014	A2	20010612		
	EP 2001-950576	A3	20010627		
	US 2001-27421	A 3	20011220		
	WO 2001-US49522	W	20011226		
	US 2003-366295	A 3	20030213		
OS	MARPAT 138:47038				

os MARPAT 138:47038

RN

Ir(III) compds. with substituted 2-phenylpyridines, phenylpyrimidines, and AB phenylquinolines, and devices, esp. electroluminescent devices, that are made with the Ir(III) compds., are described. Precursor ligands for the devices are also described.

364067-15-2P 370878-74-3P 370878-76-5P 370878-77-6P 370878-78-7P 370878-79-8P 370878-80-1P 387859-66-7P 387859-72-5P 387859-73-6P 435294-05-6P 435294-37-4P

(iridium compds. with fluorinated phenylpyridines and phenylpyrimidines and phenylquinolines and electroluminescent devices based on the compds. and their precursors) 435294-05-6 HCAPLUS

Iridium, bis[4-fluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C](2,4-CN pentanedionato-.kappa.O,.kappa.O')-

RN 435294-74-9 HCAPLUS

CN Iridium, di-.mu.-chlorotetrakis[4,6-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]di- (9CI) (CA INDEX NAME)

Sheet 2 of

d

L36 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:978186 DN 138:63633

TI Organic electroluminescent device containing dispersion dopant in the emitting layer

IN Furugori, Manabu; Okada, Shinjiro; Tsuboyama, Akira; Takiguchi, Takao;
Miura, Seishi; Moriyama, Takashi; Igawa, Satoshi; Kamatani, Jun;

PA Canon Kabushiki Kaisha, Japan

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002104080	A1	20021227	WO 2002-JP5891	20020613
	JP 2003068465	A2	20030307	JP 2002-143441	20020517
	JP 2003068466	A2	20030307	JP 2002-143442	20020517
	JP 2003068461	A2	20030307	JP 2002-143443	20020517
	EP 1399002	A1	20040317	EP 2002-738680	20020613
	US 2003141809	A1	20030731	US 2002-207843	20020731
	US 6838818	B2	20050104		
PRAI	JP 2001-181416	A	20010615		
	JP 2002-143441	Α	20020517		
	JP 2002-143442	Α	20020517		
	JP 2002-143443	A	20020517		
	WO 2002-JP5891	W	20020613		

The invention refers to an org. electroluminescent device comprising an emitting material and a dopant for improving dispersion in the emitting layer, wherein the dopant can be a combination of an emitting compd. and a non-emitting compd., or can be a current promoting material. When the dopant contains an emitting compd., the emission wavelength of the dopant is similar to that of the main emitting material. The emitting material and the dopant are placed in the evapn. boat together for improved dispersion of the emitting material, improved emission efficiency and long life.

IT 435294-06-7

(org. electroluminescent device contg. dispersion dopant in emitting layer)

RN 435294-06-7 HCAPLUS

CN Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI)

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:194567 HCAPLUS

DN 138:245321

TI Metal coordination compound and organic electroluminescent device using the compound

IN Tsuboyama, Akira; Okada, Shinjiro; Takiguchi, Takao; Igawa, Satoshi; Kamatani, Atsushi; Moriyama, Takashi; Miura, Kiyoshi; Furugori, Manabu; Iwawaki, Hironobu

PA Canon Inc., Japan

PATENT NO. KIND DATE APPLICATION NO. DATE

----JP 2003073387 A2 20030312 JP 2001-267234 20010904

20010904

PRAI JP 2001-267234

PI

OS MARPAT 138:245321

The compd. is a 6-coordinate complex involving only one bidentate ligand having metal-carbon linkage. The electroluminescent device has a light-emitting layer contg. the complex sandwiched between a pair of electrodes on a substrate wherein emission from the complex in transition from an excited state to the ground state is used. The electroluminescent device, showing high emission efficiency, is used in a display device having a means of driving of emission. The complex is manufd. by substitution of a complex I with another complex II, III, IV, or V followed by sepn. and purifn.

IT 501329-63-1P 501329-64-2P 501329-69-7P

(six-coordinate metal complex with one bidentate ligand for org. electroluminescent display device)

RN 501329-63-1 HCAPLUS

CN Iridium, [2-(6-methyl-1-isoquinolinyl-.kappa.N)-5-(trifluoromethyl)phenyl-.kappa.C]bis(2,4-pentanedionato-.kappa.O,.kappa.O')-, (OC-6-31)-

RN 501329-64-2 HCAPLUS

CN Iridium, [5-butyl-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]bis[4,4,4-trifluoro-1-(2-thienyl)-1,3-butanedionato-.kappa.O,.kappa.O']-

$$rac{1}{C}$$

3/12/03 JP Pub

> Sheet 1 of 2

RN 501329-69-7 HCAPLUS

CN Iridium, [2-(5-fluoro-1-isoquinolinyl-.kappa.N)-5-(trifluoromethyl)phenyl-.kappa.C]bis(2,4-pentanedionato-.kappa.O,.kappa.O')-, (OC-6-31)- (9CI) (CA INDEX NAME)

Sheet a of 2

L39 ANSWER 5 OF 25 HCAPLUS COPYRIGHT ACS on STN

AN 2003:300486 HCAPLUS

DN 138:328754

ED Entered STN: 18 Apr 2003

TI Phosphorescent compounds and devices comprising the same

IN Kwong, Raymond C.; Knowles, David B.; Thompson, Mark E.

The University of Southern California, USA; Universal Display Corporation PA APPLICATION NO. DATE KIND DATE PATENT NO. _____ US 2001-981496 20011017 A1 20030417 US 2003072964 ΡI B2 20041228 US 6835469 20030424 WO 2002-US33040 20021017 A1 WO 2003033617 20021017 JP 2003-536348 T2 20050303 JP 2005506361

PRAI US 2001-981496 A 20011017 WO 2002-US33040 W 20021017

OS MARPAT 138:328754

Organometallic complexes comprising phenylquinolinato ligands are provided. Methods of controlling the positions of photoluminescence maxima in the complexes entailing the selection of appropriate substituents for the ligands are described. Org. light-emitting devices comprising these compds. are also described, as are displays incorporating the light-emitting devices.

IT 512182-79-5P 512182-89-7P 512182-91-1P

512182-93-3P 512182-95-5P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(phenylquinoline deriv. complexes as luminescent materials and electroluminescent devices using them)

RN 512182-79-5 HCAPLUS

CN Iridium, bis[3-fluoro-2-(2-quinolinyl-.kappa.N)phenyl-.kappa.C](2,4-pentanedionato-.kappa.O,.kappa.O')- (9CI) (CA INDEX NAME)

PAGE 1-A

> see next sheet for bottom of structure

Sheet I of 5

PAGE 2-A

RN 512182-89-7 HCAPLUS CN Iridium, (2,4-pentaned:

Iridium, (2,4-pentanedionato-.kappa.O,.kappa.O')bis[2-(2-quinolinyl-.kappa.N)-3-(trifluoromethyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

CN Iridium, (2,4-pentanedionato-.kappa.O,.kappa.O')bis[2-(2-quinolinyl-.kappa.N)-4-(trifluoromethyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 512182-93-3 HCAPLUS

CN Iridium, (2,4-pentanedionato-.kappa.O,.kappa.O')bis[2-(2-quinolinyl-.kappa.N)-5-(trifluoromethyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 512182-95-5 HCAPLUS

CN Iridium, bis[3,5-difluoro-2-(2-quinolinyl-.kappa.N)phenyl-.kappa.C](2,4-pentanedionato-.kappa.O,.kappa.O')- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F \\ \hline \\ N \\ \hline \\ Ir3+ \\ \hline \\ C\bar{H} \\ \end{array}$$

Sheet 5 of 5

PAGE 2-A